

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

ORIGINAL
FILE

RECEIVED

JAN - 8 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In The Matter of

Amendment Of The Commission's
Rules to Establish New Personal
Communications Services

) GEN Docket No. 90-314
) ET Docket No. 92-100
)
) RM-7140, RM-7175, RM-7617
) RM-7618, RM-7760, RM-7782
) RM-7860, RM-7977, RM-7978
) RM-7979, RM-7980
)
) PP-35 through PP-40,
) PP-79 through PP-85
)

REPLY COMMENTS OF NYNEX CORPORATION

NYNEX CORPORATION

Mary McDermott
George J. Brennan

120 Bloomingdale Road
White Plains, NY 10605
914/644-5234

Its Attorneys

Dated: January 8, 1993

No. of Copies rec'd 0+5
List A B C D E

TABLE OF CONTENTS

REPLY COMMENTS OF NYNEX CORPORATION

	<u>Page</u>
Summary	i
I. INTRODUCTION	1
II. LOCAL EXCHANGE CARRIERS MUST BE ELIGIBLE TO APPLY FOR PCS LICENSES	3
A. LEC Eligibility Will Help Satisfy The Commission's Regulatory Goals	3
B. LECs With Cellular Affiliates Should Not Be Precluded From PCS License Eligibility	6
III. CELLULAR CARRIERS MUST NOT BE EXCLUDED FROM PCS LICENSE ELIGIBILITY	8
IV. THE COMMISSION SHOULD ESTABLISH PCS SERVICE AREAS THAT OPTIMIZE AND BALANCE ITS GOALS IN THIS PROCEEDING	9
V. PCS LICENSING METHODOLOGY MUST SERVE THE PUBLIC INTEREST	12
VI. ALLOCATING SPECTRUM FOR UNLICENSED DEVICES WILL HELP SPEED THE DELIVERY OF MASS MARKET PCS SERVICES	14
VII. PCS SHOULD BE CLASSIFIED AS A COMMON CARRIER SERVICE	15
VIII. CONCLUSION	16

SUMMARY

The FCC should adopt PCS rules that allow for participation by a broad range of service providers. That approach will foster both the development and deployment of PCS services. Nationwide licenses, such as those proposed by MCI, would serve only to limit the number of participants. The PCS market and its customers will be best served by ensuring a large number of providers, rather than arbitrarily excluding potential providers.

Of equal importance is why certain potential PCS service providers must be allowed to participate. Local Exchange Carrier ("LEC") participation is necessary if the Commission's goals are to be met. The LECs are well-suited to undertake the marketing and customer education and support processes required to implement mass-market PCS. Cellular carriers should be eligible for PCS spectrum allocations outside their current service areas. In addition, cellular carriers should be eligible for licenses within their current service areas, not to replicate existing cellular services, but to provide new data services. To arbitrarily exclude any potential qualified participant at this stage of PCS development would only serve to retard what could otherwise be rapid development.

Comparative hearings, while initially cumbersome, will ultimately produce the best, most qualified providers. If lotteries are chosen as an alternative, the Commission must put in place threshold requirements to discourage spectrum speculators.

To further promote the rapid development of PCS, the Commission should consider licensing five PCS providers per service area and allocating spectrum for unlicensed devices.

RECEIVED

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

NOV - 8 1993

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In The Matter of

Amendment Of The Commission's
Rules to Establish New Personal
Communications Services

) GEN Docket No. 90-314
) ET Docket No. 92-100
)
) RM-7140, RM-7175, RM-7617
) RM-7618, RM-7760, RM-7782
) RM-7860, RM-7977, RM-7978
) RM-7979, RM-7980
)
) PP-35 through PP-40,
) PP-79 through PP-85
)

REPLY COMMENTS

NYNEX Corporation ("NYNEX") submits these Reply
Comments pursuant to a Notice of Proposed Rulemaking and
Tentative Decision of the Federal Communications Commission
("Notice") seeking comprehensive comment on the further
development and regulatory treatment of Personal Communications
Services ("PCS").

I. INTRODUCTION

A majority of commenting parties chose to address who
should or should not be eligible to receive PCS licenses. For
a variety of reasons, many contend that all interested parties

should be allowed to participate.¹ Others argue that very few should be eligible for licenses.²

A greater number of participants is important to foster both the development and deployment of PCS services. Nationwide licenses, such as those proposed by MCI, would serve only to limit the number of participants. The PCS market and its customers will be best served by ensuring a large number of providers, rather than arbitrarily excluding potential providers.

Of equal importance is why certain potential PCS service providers must be allowed to participate. Local Exchange Carrier ("LEC") participation is necessary if the Commission's goals are to be met. The LECs are well-suited to undertake the marketing and customer education and support processes required to implement mass-market PCS. Cellular carriers should be eligible for PCS spectrum allocations outside their current service areas. In addition, cellular carriers should be eligible for licenses within their current service areas, not to replicate existing cellular services, but to provide new data services. To arbitrarily exclude any potential qualified participant at this stage of PCS development would only serve to retard what could otherwise be rapid development.

¹ See generally e.g., Cellular Telecommunications Industry Association ("CTIA") Comments; Alltel Companies Comments; BellSouth Comments; and Citizens Utilities Company Comments.

² See generally e.g., MCI Comments, Calcell Wireless, Inc. Comments; PCN Communications, Inc. Comments.

Comparative hearings, while initially cumbersome, will ultimately produce the best, most qualified providers. If lotteries are chosen as an alternative, the Commission must put in place threshold requirements to discourage spectrum speculators.

To further promote the rapid development of PCS, the Commission should consider licensing five PCS providers per service area and allocating spectrum for unlicensed devices.

II. LOCAL EXCHANGE CARRIERS MUST BE ELIGIBLE TO APPLY FOR PCS LICENSES

A. LEC Eligibility Will Help Satisfy The Commission's Regulatory Goals

No potential PCS applicant, no matter how technically adept, can hope to put a PCS system in place and expect that the world will beat a path to its door. Instead, in addition to technical expertise; marketing, distribution and customer education and support processes must be in place to help ensure a full awareness and use of PCS. The market development of PCS will be evolutionary, requiring constant testing of systems, monitoring of consumer reaction and adaptation to particular consumer needs. No other type of firm can bring these broad capabilities to the residential and small business mass market as effectively and efficiently as the LECs.³

³ See, NYNEX Comments, Appendix A, Report in Support of NYNEX Filing, LEC Role In PCS Market Development, J. Byrnes and R. Townsend ("Byrnes Report"). Also, NYNEX reiterates that regardless of the Commission's ultimate decision concerning LEC eligibility, NYNEX supports the

Market penetration of PCS will be hastened by delivering PCS in coordination with other telecommunications services that help customers meet their telecommunications needs. For example, voice messaging services, voice mailboxes, and call handling/call routing features may all contribute to making PCS more useful to the customer. In many cases, these capabilities must be combined into specific applications that the customer can understand and purchase. These activities are local rather than national in nature, and can be undertaken most effectively by local providers. The LECs, who have the greatest commitment to a technologically sophisticated public network and to widespread use of telecommunications services, can and must make crucial technological and marketing contributions to the development of PCS, especially if residences and small businesses throughout our country are to realize the benefits of the technology.

Market forces will continue to push the LECs to develop products and services that serve customers in

3 (Footnote Continued From Previous Page)

Commission's proposal that "PCS licensees have a federally protected right to interconnection with the public switched telephone network." The claim made by Vanguard Cellular that "its ongoing interconnection dispute with [New England Telephone] is but an example of the propensity of certain LECs to discriminate against non-wireline carriers seeking interconnection" is incorrect. The regulatory requirements in Maine for local call contribution costs yield rates for network usage, including toll, access and cellular interconnection above incremental costs. Further, NET has sought to resolve a number of outstanding cellular issues, including a permanent interconnection charge, with the Maine Public Utilities Commission staff.

residences and small businesses. This commitment to the consumer mass market segments, in combination with both the infrastructure and institutional capability needed to serve these customers, sets the the LECs apart from all other providers. As the FCC's Office of Plans and Policy Study concludes, "substantial benefits could be realized by allowing them [telcos] to offer PCS on an integrated basis with telephone services"⁴ and that consumers "could benefit from allowing local telcos to hold PCS licenses if a large number of PCS licenses are issued."⁵

Exclusion of LECs from PCS deployment, especially in the critical initial period, will have serious negative repercussions on PCS market development. Because technological development and market development must proceed together, the Commission should consider the effects of its rules not simply on technology but also on the capability of market participants to effectively develop telecommunications markets, bringing new products to the largest possible groups of customers. A review of current experimental license holders would easily confirm that LECs, including the NYNEX Telephone Companies ("NTCs"), are interested in developing wireless services. To dissuade LECs from pursuing these efforts by preventing their deployment for any period of time would pointlessly restrain the rapid deployment of PCS.

⁴ FCC Office of Plans and Policy Study Putting it All Together: The Cost Structure of Personal Communications Services, David P. Reed, FCC Office of Plans and Policy No. 28, Nov. 1992, p. 56. (the "OPP Study").

⁵ Id. p. 60.

B. LECs With Cellular Affiliates Should Not Be Precluded From PCS License Eligibility

The Commission recognized a "strong case" for LECs to provide PCS within their respective service areas.⁶ However, the Commission's proposal that LECs with cellular affiliates should be barred from holding PCS licenses would mean that a number of LECs, including the NTCs, would neither be eligible for PCS licenses, nor have access to their cellular affiliates' spectrum.

The regulatory model proposed by the Commission presumes that all LECs have unfettered access to the spectrum currently held by their cellular affiliates. In their respective comments, the Department of Justice ("DOJ") and the National Telecommunications and Information Administration ("NTIA"),⁷ also presume an ability of LECs to utilize separately held cellular spectrum. Such is not the case given Part 22 restrictions on the Bell Operating Companies ("BOCs").⁸ To assume otherwise is to unfairly exclude the

⁶ Notice, para. 75.

⁷ See, e.g., DOJ Comments, p. 30, advocating a four year prohibition, NTIA Comments, p. 28, advocating a three year prohibition for cellular providers which would then apply to LECs with cellular holdings, see further discussion NTIA Comments, p. 29 et seq.

⁸ 47 C.F.R. Subpart K, Part 22, § 22.901(b). The "catch" of Part 22 is dramatized by Comments filed by the New York Department of Public Services ("NYDPS"). NYDPS recommends that if the spectrum assigned to an existing cellular carrier (affiliated with a LEC) is adequate to enable the provision of PCS services by the cellular carrier, then neither the cellular provider nor the affiliated LEC should be eligible to apply for a PCS license. Since BOC LECs are required to be structurally separate from cellular carriers, this restriction would preclude BOC LECs from applying for a PCS license.

BOCs from the PCS arena. Thus, the NTCs would be prevented from implementing PCS services and technologies such as Cordless Charge-A-CallSM public telephone service and Wireless Loop Access technologies, based solely on their affiliation with NYNEX Mobile Communications Company ("NMCC"); even though the NMCC cellular spectrum (even if sufficient - which it is not) is not available for use by the NTCs.⁹

In paragraph 76 of the Notice, the Commission recognizes that the BOCs are not permitted to use cellular spectrum, and asks whether the "separate subsidiary" requirements should be eliminated. Certainly, there is no reason to maintain these rules. The choice of the optimum corporate structure for its various enterprises should be a business decision by NYNEX, not a regulatory fiat. The competitive concerns which prompted the Commission to adopt its "separate subsidiary" rules a decade ago can be more than adequately addressed by non-structural safeguards.

If a LEC is required to maintain a separate subsidiary relationship with a cellular affiliate, the LEC should be permitted to request PCS spectrum irrespective of the adequacy of the spectrum allocated to the cellular affiliate. Under these circumstances, a LEC request for spectrum should be

⁹ Further, to complicate matters numerous NMCC cellular licenses are owned by partnerships including NMCC. Even if the Part 22 restrictions were lifted, NYNEX access to current cellular spectrum would be limited pursuant to those partnership agreements.

viewed no less favorably than a spectrum request submitted by any other party.¹⁰

III. CELLULAR CARRIERS MUST NOT BE EXCLUDED FROM PCS
LICENSE ELIGIBILITY

The cellular industry will not be able to provide service to both its current market and potential new PCS data services market within its existing allocation. This conclusion is borne out by the OPP Study, which demonstrates that the current cellular allocation is insufficient.¹¹

The Commission must allow parties to take advantage of the economies of scope provided by an existing cellular network.¹² The Commission should consider giving cellular carriers in service area eligibility to provide new data services. Simply liberalizing current cellular rules to allow cellular carriers to offer PCS-type services¹³ will be of no value if cellular carriers do not have adequate spectrum to provide such services. The Commission will best serve the

¹⁰ This would rectify the "catch 22" implications of the NYDPS recommendation whereby a LEC could conceivably be precluded from PCS license eligibility because a cellular affiliate had adequate spectrum even though this cellular affiliate were prohibited from sharing this spectrum with the LEC due to existing requirements for structural separation.

¹¹ See, OPP Study, p. 59.

¹² As the Commission stated in paragraph 66 of the Notice, "There may be economies of scope between PCS and cellular service to the extent that a single firm holding both a cellular and a PCS license would have lower unit costs than would two firms separately holding each license."

¹³ See, NTIA Comments, p. 28.

public interest by allowing cellular carriers equal participation in PCS outside current regions and competitive participation (i.e. data services in the 900 MHz range) within their service areas.

IV. THE COMMISSION SHOULD ESTABLISH PCS SERVICE AREAS THAT OPTIMIZE AND BALANCE ITS GOALS IN THIS PROCEEDING

The Commission requested comments on the concept of awarding national PCS licenses. A number of parties expressed serious reservations about the concept.¹⁴ MCI, in contrast, was a major proponent of a national license scheme. MCI, in effect, asks the Commission to allow three national "network organizers" to take control of the future of PCS. At the outset, it is difficult to determine who, other than MCI, would be qualified to serve as a "major national participant" under the MCI proposal. The MCI consortium proposal would require a "major participant" to serve as "network manager". This network manager will have enormous power within the consortium. The proposal specifically excludes any firm with cellular interests from that role¹⁵ which would exclude all the Bell Operating Companies, GTE and virtually every other LEC of any size. The cellular exclusion also effectively bars two of the three major interexchange carriers. (AT&T has announced a planned affiliation with McCaw, and Sprint is merging with

¹⁴ See e.g., DOJ Comments, p 17; NTIA Comments, p. 19; Century Cellunet Comments, p. 10 et. seq.

¹⁵ MCI Comments, p. 27.

Centel.) The proposal would also exclude foreign ownership.¹⁶ The disqualifications proposed would eliminate virtually every major public network telecommunications service provider, except MCI.

As the DOJ notes: "national licensing ... [is] an approach that could severely limit the total number of firms nationwide that can enter PCS businesses and thereby retard the development of innovative and diversified PCS services."¹⁷ If the number of PCS providers is so dramatically decreased, it is likely that the potential for innovation offered by smaller worthy participants will be lost, thus decreasing competition in the delivery of services. The sheer magnitude of the investment in a national PCS consortium will cause the consortium to be very cautious about new ideas. Even if a local member of a consortium experiments to develop a new PCS product, the ultimate ability to deploy that product will be constrained by the decisions made by the entire governing structure. Conservative, centralized decision-making is likely to replace local innovation.

Proponents of national licenses assume that the coordination necessary for PCS deployment can be achieved only under unified national leadership. This assumption is not valid. The exact degree of national coordination that is required has yet to be determined, and it should be determined by market forces rather than by regulatory fiat. Those same

¹⁶ MCI Comments, p. 24.

¹⁷ DOJ Comments, p. 16.

market forces will induce an appropriate level of voluntary cooperation. The goal of nationwide interoperability of systems, advanced by MCI¹⁸ does not require national licensing for PCS. Competition among local systems will lead to interoperability to the extent required by customers. Further, the fact that interconnection to the public switched telephone system is a "federally protected right"¹⁹ will no doubt aid in the interoperability of local PCS systems.

Over one half of the parties commenting on the issue recommend the use of Metropolitan Statistical Areas/Rural Service Areas ("MSA/RSAs") as the starting point for PCS service areas; this is by far the single most recommended licensing area. Designation of MSAs/RSAs will provide a level playing field for competition with cellular carriers and allow that competitive market to determine what consolidation, if any, is required in the industry to optimize the potential of PCS. As the DOJ noted, starting with smaller service areas, but permitting requisite market consolidation, will facilitate the proper PCS market adjustment.²⁰

A larger number of local licenses will allow many different concepts of PCS to be marketed in different regions of the country. The success or failure of alternative PCS concepts could rapidly build our understanding of how best to use the technological possibilities of PCS to deliver services

¹⁸ See, MCI Comments, p. 11.

¹⁹ Notice, para. 99.

²⁰ See, DOJ Comments, p. iii.

that customers value, and how best to build market demand for these services. A robust competitive market of five 20 MHz licensees per service area will ensure more rapid deployment of PCS services, continued technological development and spectrum efficiency.

V. PCS LICENSING METHODOLOGY MUST SERVE THE PUBLIC INTEREST

In its Comments, NYNEX recommended that all licenses be assigned via the comparative hearing process.²¹ This process will allow the Commission to determine the parties best suited to provide PCS services. NYNEX agrees with Cox Enterprises, that despite the Commission's perception of the drawbacks of comparative hearings, "it is the one mechanism best suited to ensure that the licensees selected are the ones most committed and technically able to speed service to the public".²²

As with the development of cellular service, the initial establishment of a competitive arena is crucial to PCS. Cellular service might not be as successful as it is today were it not for the Commission's decision to select the licensees in each of the largest market areas. Comparative hearings provide the most appropriate way of selecting qualified parties willing to provide competitive services to the marketplace in a timely manner.

²¹ See, NYNEX Comments, pp. 27-30.

²² See, Cox Enterprises, Inc. Comments p. 22.

To ease expense and time concerns associated with the use of the comparative hearing process, the Commission should consider adopting the approach of those parties who recommend strict threshold qualifications.²³ As Personal Communications Network Systems of New York points out, a comparative "paper" hearing could be used to expedite the licensee selection process.²⁴ Only qualified parties wishing to provide PCS should be allowed to participate in a comparative "paper" hearing process.

Should the Commission decide to use a lottery process, it must make every effort to ensure that only qualified parties participate in the lottery. As Cox Enterprises notes, should the Commission rely "on lotteries to select PCS licensees, its licensing procedures must be structured to ensure that only those entities that have fully satisfied rigorous requirements sufficient to merit serious consideration in a comparative hearing be eligible."²⁵

Certainly, applicants in either a comparative hearing process or lottery selection process must be able to demonstrate that they have the resources to construct a PCS system within a reasonable period of time after the license is awarded and operate a PCS system for a minimum of the initial

²³ See, Personal Communications Network Services of New York, Inc. Comments p. 10; Motorola Comments p. 44; and American Personal Communications Comments p. 40.

²⁴ See, Personal Communications Network Services of New York, Inc. Comments p. 12.

²⁵ See, Cox Enterprises, Inc. Comments, p. 22.

license period. Each application should include an engineering analysis of the proposed PCS system and a detailed financial commitment for the necessary funding. Required financial resources will vary by market; therefore, applicants should specify the market sought and provide requisite financial data for that market. Applicants must demonstrate technical expertise, including radio frequency engineering, traffic engineering, network design and maintenance capability.

VI. ALLOCATING SPECTRUM FOR UNLICENSED DEVICES WILL HELP
SPEED THE DELIVERY OF MASS MARKET PCS SERVICES

Many parties recognize the potential of PCS devices operating on an unlicensed basis.²⁶ By clearing the 1910-1930 MHz band, the Commission will send a strong signal to equipment manufacturers and vendors that future use of the spectrum is secure for unlicensed devices. Manufacturers and vendors will have the incentive to expedite delivery of first-generation PCS equipment, perhaps in the form of further advanced cordless telephones.²⁷ Manufacturers could then increase functionality based on customer demand and anticipated technological advances. A suitable allocation for unlicensed devices will promote the more rapid introduction of mass market PCS.

²⁶ See, e.g., Bell South Comments, pp. 20-26; Lincoln Telephone and Telegraph Comments, p. 10; Matsushita Communications Industrial Corporation of America Comments, p.5.

²⁷ The Canadian Communications Ministry recently selected four public cordless telephone licensees to offer service using compatible base stations.

VII. PCS SHOULD BE CLASSIFIED AS A COMMON CARRIER SERVICE

In its Comments, NYNEX advocated that in the interest of creating and maintaining a level playing field for telecommunication providers, the Commission should classify PCS as a common carrier service. NYNEX is encouraged by the number and the diversity of other parties who agree.²⁸ The diversity of such parties denotes recognition that an equally diverse group can and will compete against each other as well as current common carriers. Since the Commission's ultimate goal is the creation of a wireless network that can compete and integrate with the wireline network, it is reasonable to expect a level playing field based on the principles of common carriage.²⁹

²⁸ See e.g., Cellular Service, Inc. Comments, at p. 7; MCI Comments, at pp 23-24; American Personal Communications Comments, at p. 49; National Association of Regulatory Utility Commissioners Comments, at p. 7 et. seq.

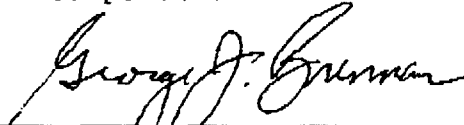
²⁹ See, United States Small Business Administration Comments, p. 28.

VIII. CONCLUSION

As the number of comments filed proves, there is no shortage of willing participants in the PCS arena. The Commission must temper this willingness with the assurance that eligible participants are ready and able to commit to the development and universal implementation of PCS. LECs are best-positioned to see the task through with a commitment to continued customer service. Further, the Commission must refrain from arbitrarily excluding any other qualified participant during this initial stage of PCS development.

Respectfully submitted,

NYNEX Corporation

By: 

Mary McDermott
George J. Brennan

120 Bloomingdale Road
White Plains, NY 10605
914/644-5234

Its Attorneys

Dated: January 8, 1993

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing REPLY
COMMENTS OF NYNEX CORPORATION, was served by first class United
States mail, postage prepaid, on each of the parties indicated on
the attached service list, this 8th day of January, 1993.


SAMENE JOHNSON

Mark S. Fowler
James H. Barker
of LATHAM & WATKINS
1001 Pennsylvania Avenue, N.W.
Suite 1300
Washington, D.C. 20004
for Bell Atlantic Personal
Communications, Inc.

William B. Barfield
Charles P. Featherstun
David G. Richards
for BellSouth
1155 Peachtree Street, N.E.
Atlanta, Georgia 30367-6000

Charles D. Ferris
James A. Kirkland
Keith A. Barritt
for Cablevision Systems
Corporation
Mintz, Levin, Cohn, Ferris,
Glovsky & Popeo, P.C.
701 Pennsylvania Ave., N.W.
Suite 900
Washington, D.C. 20004

William E. Kennard
Jacqueline R. Kinney
for Calcell Wireless Inc.
VERNER, LIIPFERT, BERNHARD,
McPHERSON AND HAND, CHARTERED
901 15th Street, N.W.
Suite 700
Washington, D.C. 20005

Peter A. Casciato
for Cellular Service, Inc.
A Professional Corporation
1500 Sansome Street
Suite 201
San Francisco, CA 94111

Thomas J. Casey
Jay L. Birnbaum
for Cellular Communications, Inc.
SKADDEN, ARPS, SLATE, MEAGHER & FLOM
1440 New York Avenue, N.W.
Washington, D.C. 20005

Albert H. Frazier, Jr.
Vice President
CELSAT INC.
879 W. 190th Street
Suite 400
Gardena, CA 90248

Victor J. Toth
Counsel to CELSAT, Inc.
Law Offices, Victor Toth, P.C.
2719 Soapstone Drive
Reston, VA 22091

Charles F. Wright
Vice President - Corporate
Development
CENTEL CORPORATION
8725 Higgins Road
Chicago, IL 60631

Harold Mordkofsky
Robert M. Jackson
Blooston, Mordkofsky,
Jackson & Dickens
2120 L Street, N.W., Suite 300
Washington, D.C. 20037
Attorneys for Century
Cellunet, Inc.

J. S. Quarforth
President
Clifton Forge - Waynesboro
Telephone Company for Small
Rural Virginia Telcos
401 Spring Lane, Suite 300
P.O. Box 1990
Waynesboro, VA 22980

Andrew D. Lipman
Catherine Wang
SWIDLER & BERLIN, CHTD.
3000 K Street, N.W.
Washington, D.C. 20007
for Clear Creek Mutual
Telephone Co., et al.

Chandos A. Rypinski
LACE, Inc.
655 Redwood Highway #340
Mill Valley, CA 94941

David Lemon, P.E.
Director Engineering -
Research and Development
4975 Preston Park Blvd.
8th Floor
Plano, TX 75093
for CNET, Inc.

Hannah A. Lancaster
President
Chesnee Telephone Company
Pansy M. Askins
P.O. Box 430
Chesnee, South Carolina 29323

Cheryl Lynn Schneider
for Communications
Satellite Corporation
950 L'Enfant Plaza, S.W.
Washington, D.C. 20024

Ellen S. Deutsch
Senior Counsel
Citizens Utilities Company
of California
P.O. Box 496020
1035 Placer Street
Redding, Calif. 96049-6020

Brenda L. Fox
Leonard J. Kennedy
Melissa Rogers
DOW, LOHNES & ALBERTSON
1255 23rd Street, N.W.
Suite 500
Washington, D.C. 20037
for COMCAST PCS COMM., INC.

W. Randolph Young
1050 17th St., N.W.
Suite 1200
Washington, D.C. 20036
for CITY UTILITIES OF
SPRINGFIELD, MISSOURI

H. Mark Gibson
Senior Engineer
COMSEARCH
11720 Sunrise Valley Drive
Reston, VA 220911

Barry R. Rubens
Manager - Regulatory Affairs
The Concord Telephone Company
68 Cabarrus Avenue, East
P.O. Box 227
Concord, North Carolina 28026

Raymond G. Bender, Jr.
Deborah R. Broughton
Counsel For dbX Corporation
DOW, LOHNES & ALBERTSON
1255 Twenty-third Street, N.W.
Suite 500
Washington, D.C. 20037

John D. Lockton
Managing Partner
Corporate Technology Partners
520 S. El Camino Real
Suite 715
San Mateo, California 94402

Richard Liebeskind
Luin P. Fitch, Jr.
Communications and Finance
Section Antitrust Division
U.S. Department of Justice
Rm. 8104
Judiciary Center Building
555 Fourth Street, N.W.
Washington, D.C. 20001

Werner K. Hartenberger
Laura H. Phillips
Jonathan M. Levy
DOW, LOHNES & ALBERTSON
1255 23rd Street, N.W.
Suite 500
Washington, D.C. 20037
for COX ENTERPRISES, INC.

Gerald S. McGowan
Marjorie Giller Spivak
For DIAL PAGE, INC.
Lukas, McGowan, Nace & Gutierrez
1819 H Street, N.W., Suite 700
Washington, D.C. 20006

Philip L. Verveer
Sue D. Blumenfeld
Michele R. Pistone
Willkie Farr & Gallagher
1155 21st Street, N.W.
Suite 600
Washington, D.C. 20036-3384
for Cellular Telecommunications
Industry Association

Shirley S. Fujimoto
Christine M. Gill
Brian T. Ashby
For DOMESTIC AUTOMATION CO.
Keller and Heckman
1001 G. Street, N.W.
Suite 500 West
Washington, D.C. 20001

Daryl L. Avery
Peter G. Wolfe
For PUBLIC SERVICE COMMISSION
OF THE DISTRICT OF COLUMBIA
450 Fifth Street, N.W.
Washington, D.C. 20001

Riley M. Murphy
For Dr. Charles I. Berlin
1100 Poydras Street
Suite 2950
New Orleans, LA 70163

Fred I. Denny
Vice President, Engineering
& Fossil Fuels
Edison Electric Institute
701 Pennsylvania Ave., N.W.
Washington, D.C. 20004

Dinah D. McElfresh
Executive Director
Electromagnetic Energy
Policy Alliance
1255 Twenty-Third Street, N.W.
Suite 850
Washington, D.C. 20037-1174

David C. Jatlow
For The Ericsson Corporation
Young & Jatlow
Suite 600
2300 N Street, N.W.
Washington, D.C. 20037

Paul J. Sinderbrand
Dawn G. Alexander
For EXPRESS COMMUNICATIONS, INC.
Keck, Mahin & Cate
1201 New York Avenue, N.W.
Penthouse Suite
Washington, D.C. 20005-3919

Robert S. Foosaner
Lawrence R. Krevor
For FLEET CALL, INC.
601 13th Street, N.W.
Suite 1110 South
Washington, D.C. 20005

David L. Hill
Audrey P. Rasmussen
For FLORIDA CELLULAR RSA
LIMITED PARTNERSHIP
O'Connor & Hannan
1919 Pennsylvania Avenue, N.W.
Suite 800
Washington, D.C. 20006

W. Harrel Freeman
For Freeman Engineering
Assoc., Inc.
Blooston, Mordkofsy, Jackson
& Dickens
2120 L Street, N.W.
Suite 300
Washington, D.C. 20037

Paul J. Sinderbrand
Dawn G. Alexander
For GATEWAY TECHNOLOGY, INC.
Keck, Mahin & Cate
1201 New York Avenue, N.W.
Penthouse
Washington, D.C. 20005-3919

Lawrence M. Miller
Steven C. Schaffer
GLOBAL ENHANCED MESSAGING
VENTURE
Schwartz, Woods & Miller
Suite 300
The Dupont Circle Building
1350 Connecticut Avenue, N.W.
Washington, D.C. 20036

Edward C. Schmults
Sr. Vice-President
External Affairs &
General Counsel
GTE Corporation
One Stamford Forum
Stamford, CT 06904